

WHAT IS CLAIMED IS:

A dual mode wireless transceiver comprising:

a direct sequence spread spectrum transmitter portion;

a frequency hopping spread spectrum transmitter portion;

a mode selection circuit coupled to said direct sequence spread spectrum transmission portion and to said frequency hopping spread spectrum transmission portion to selectively activate said direct sequence spread spectrum portion when in a direct sequence spread spectrum transmission mode and to activate said frequency hopping spread spectrum transmission portion when in a frequency hopping spread spectrum transmission mode; and

a receiver portion capable of receiving and demodulating both direct sequence spread spectrum modulated signals and frequency hopping spread spectrum modulated signals.

2. The dual mode wireless transceiver of Claim 1, wherein said direct sequence spread spectrum transmitter portion comprises a spreading code generator selectively mixed with an input signal.

3. The dual mode wireless transceiver of Claim 2, further comprising a frequency generator and wherein said frequency hopping spread spectrum transmitter portion further includes a hopping sequence generator selectively coupled to said frequency generator.

4. The dual mode wireless transceiver of Claim 2, further comprising a spreading code mixer for mixing the output of said spreading code generator and the input signal.

5. The dual mode wireless transceiver of Claim 4, further comprising a modulating mixer coupled to receive the output of said spreading code mixer and said frequency generator.

6. The dual mode wireless transceiver of Claim 1, wherein said receiver portion selectively receives a spreading code from said direct sequence spread spectrum transmitter portion.

7. The dual mode wireless transceiver of Claim 1, wherein said receiver portion selectively receives a demodulation frequency signal from said frequency hopping spread spectrum transmitter portion.

8. A dual mode wireless transceiver comprising:

5 a frequency generator;

a spreading code mixer;

a spreading code generator capable of generating a spreading code and selectively coupled to said spreading code mixer;

10 a hopping sequence generator capable of generating a hopping sequence and selectively coupled to said frequency generator;

a modulating mixer coupled to receive the spreading code of said spreading code mixer and an output of said frequency generator;

a spread spectrum control signal system coupled to control application of said spreading code to said spreading code mixer and said hopping sequence to said frequency generator; and

15 a demodulation portion coupled to receive the output of said frequency generator.

9. The dual mode wireless transceiver of claim 8, wherein said demodulation portion is coupled to selectively receive the spreading code of said spreading code generator.

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10. The dual mode wireless transceiver of claim 8, further comprising a spread spectrum control signal system controlling the application of said spreading code and said hopping sequence.

11. The dual mode wireless transceiver of claim 8, wherein said a spreading code mixer is a digital mixer.

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12. The dual mode wireless transceiver of claim 8, wherein said frequency generator is a phase locked loop.

13. The dual mode wireless transceiver of claim 8, wherein phase locked loop includes a voltage controlled oscillator, a lowpass filter and a frequency mixer/phase detector.

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A cordless telephone dual mode wireless transceiver comprising:

Claim 14 HAS  
been amended  
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a direct sequence spread spectrum transmitter means for modulating an input signal as a direct sequence spread spectrum signal;

a frequency hopping spread spectrum transmitter means for modulating the input signal as a frequency hopping spread spectrum signal;

a mode selection means coupled to said direct sequence spread spectrum transmitter means and to said frequency hopping spread spectrum transmitter means for selecting either said direct sequence spread spectrum transmitter means or said frequency hopping spread spectrum transmitter means for modulating the input signal; and

a receiver capable of receiving and demodulating both direct sequence spread spectrum modulated signals and frequency hopping spread spectrum modulated signals.

15. The cordless telephone dual mode wireless of Claim 14, wherein said direct sequence spread spectrum transmitter means includes a spreading code generator.

16. The cordless telephone dual mode wireless of Claim 15, further including a frequency generator and wherein said frequency hopping spread spectrum transmitter means further includes a hopping sequence generator selectively coupled to said frequency generator.

17. The dual mode wireless transceiver of Claim 15, further including a spreading code mixer for mixing the output of said spreading code generator and the input signal.

18. The cordless telephone dual mode wireless of Claim 17, further including a modulating mixer coupled to receive the output of said spreading code mixer and said frequency generator.

19. The dual mode wireless transceiver of Claim 14, wherein said receiver portion selectively receives a spreading code from said direct sequence spread spectrum transmitter means.